WORKERS' COMPENSATION BOARD
OF NOVA SCOTIA

Discussion Document

Funding Strategy 2008

FINANCIAL PROJECTIONS

2008 – 2012

Prepared by the Financial Services Department for consideration by the Audit and Finance Committee on June 21, 2007 and the Board of Directors on June 28, 2007.

Approved by the Board of
Directors:____

Table of Contents

Summary

The funding strategy outlines the WCB's proposed approach to funding current operations and the eventual elimination of the unfunded liability by approximately 2016.

Annual revisions to the funding strategy are required to reflect actual experience and changes in assumptions. Actual claims experience, assessable payroll (premium revenue), investment experience for 1995 through 2006, enhancements to the supplementary benefits program, other events including Bill 90 (in 1999) the provision of benefits for firefighters with cancer and the provision of chronic pain benefits have been taken into account in developing this 2008 – 2012 funding strategy.

The base case includes allowances for significant reductions in annual claims costs incurred related to aggressive prevention and duration targets. A reduction in durations on current claims is expected to generate an $11 million reduction in annual costs by reducing the duration index to 84 days by 2013. The full effect of these cost savings will not be fully realized until 2016. A series of prevention programs including the Priority Employers Program, My Account, and Social Marketing are expected to yield $25 million in annual savings by 2016 and reducing injury frequency to 2.26 by 2014. If savings are not achieved as expected, rate increases will be required.

We will continue to focus on eliminating the net unfunded liability by 2016 with the average assessment rate held at $2.65/$100 of payroll. Each year the Board of Directors will evaluate how we are progressing and if financial gains are greater than anticipated in our funding strategy and results reflect long term trends, we will consult with stakeholders about whether these financial gains should be used to enhance benefits, reduce assessment rates or both.

Financial gains occur when either revenue is greater than expected or costs are lower than expected. Given our aggressive cost saving targets, it is unlikely that we will be ahead of plan in this regard. Significant gains could occur on investment income in any given year however such large gains are usually offset by losses in a subsequent year. It would therefore be unwise to adjust the premium or benefit structure based on gains in this area. Assessment revenue is another area where gains are theoretically possible however a five percent increase in assessment revenue would require a sustained increase of $400 million in the payroll base for assessable employers. Based on these factors, we have concluded that the probability that sufficient gains will materialize to reduce rates or improve benefits prior to full funding is considered very low.

In years when financial results are worse than anticipated, the Board of Directors would consider the severity relative to the funding strategy and determine whether or not these results reflect a longer term trend. In consultation with stakeholders, the Board would assess whether premiums would need to increase or the period to eliminate the unfunded liability should be extended.

The base case continues to reflect the impact of the extension of pain related impairment benefits to injured workers suffering from chronic pain as a result of their compensable injury. All new or increased awards are applied within the current benefit structure. If benefits to insured workers exceed the revised estimate of $178 million ($189 million including future administration costs), the funding strategy will need revision. At this time, we do not anticipate any significant increases in the liability relating to chronic pain.

The net (net of other comprehensive income) unfunded liability is expected to decrease by $19.09 million; the result of the $23.90 million increase in the gross unfunded, and the $42.98 million expected change in other comprehensive income.

These projections are estimates based on the assumptions noted. Actual results will vary from the information presented and the variation may be material.

The proposed 2008 Administrative and Legislated Obligations budget request of $58.79 million reflects the operational, capital and project investments needed to deliver results in the various areas noted above while maintaining the current average actual assessment rate, unfunded liability retirement date, and a continued focus on the reduction of claim costs.

Background

The *Workers' Compensation Act* passed in the spring of 1995 makes specific reference to the Workers' Compensation Board funding requirements in Section 115. That section states that the WCB must make an assessment on and collect from employers sufficient funds to:

a) meet the costs of all claims payable during the year;

b) subject to Section 116, meet the future costs of all claims for all injuries occurring during the year;

c) pay the expenses incurred in administering this *Act*; and

d) pay all other amounts payable from the accident fund.

This specific reference to funding requirements, when combined with the funding strategy, gives the WCB a clear guideline for funding and budgeting on an annual basis. The funding strategy's objective is to bring the workers' compensation system to "full funding", ensuring that assets are sufficient to meet liabilities.

The target for total revenues for 2008 is $306.45 million based on:

- a projection for insured firms' assessable payroll of $8.17 billion, yielding assessment revenue of $217.99 million,
- investment income of $49.14 million, and
- self-insurer receipts of $39.32 million.

In 2008 the gross unfunded liability is expected to increase by $23.90 million. This results from the total revenue target of $306.45 million minus

- claim costs of $166.42 million,
- the growth in present value of the benefits liability of $109.39 million,
- administrative costs of $43.00 million,
- adjustment for future administration costs $(1.50) million ,
- legislated obligations of $12.42 million, and
- System Support of $0.62 million

The net (net of other comprehensive income) unfunded liability is expected to decrease by $19.09 million; the result of the $23.90 million increase in the gross unfunded, and the $42.98 million expected change in other comprehensive income.

Some of the key projection assumptions made in the funding strategy for 2008 and onwards include:

- Gross Interest Rate of 7.5% per annum
- Consumer Price Index (CPI) of 2% through 2012; 4% from 2013 onwards
- Unfunded liability eliminated in 2016
- Average assessment rate for 2008 is $2.65, holding constant until fully funded in 2016

The WCB's financial situation has improved over the past 13 years. This has allowed the Funding Strategy to be adjusted so as to reduce the period during which the unfunded was to be eliminated. To a large extent the elimination period has been used to absorb the normal variations in financial performance from estimates covering so many variables. For example, during the 2005 planning process 2024 was the anticipated full funding date.

This approach has provided for stability in assessment rates, which is one of the main objectives of any insurance system. The other objective of the Nova Scotia system has been the elimination of the unfunded liability that developed during the 70's, 80's & early 90's. This approach of using the unfunded liability elimination period as an adjustment factor for the difference between actual and projected has allowed both of these objectives to be met.

In 2003 the WCB's financial situation deteriorated mainly due a large upward adjustment in long term disability benefits relating to chronic pain. Currently, the WCB anticipates eliminating the unfunded liability by approximately 2016. Maintaining this elimination period is contingent upon no additional significant changes in cost experience or revenue generation.

The gross unfunded liability was $390.0 million at the end of 2006 coupled with accumulated other comprehensive income of $130.0 million results in a net unfunded liability of $260.0 million, representing a funded ratio of 81%, rather than the $454.6 million or 46% funded ratio expected in the original funding strategy. However, these results represent only the first thirteen years in a long process toward financial stability and do not yet reflect much experience with long-term disability under the new legislation. Long-term disability is the WCB's largest cost area.

This funding strategy presents the base case on which future annual revisions may be based. The base case contemplates an average assessment rate of $2.65 in 2008. The base case takes into account chronic pain related benefits, and changes in actuarial assumptions relating to the valuation of long-term disability benefits.

Under the current model the elimination period and the average assessment rate are directly linked. A decision to hold the elimination period constant could lead to a "yo-yo" effect on rates to adjust to varying economic factors through time. Conversely, if a decision were made to hold the average assessment rate constant, the elimination

period would fluctuate.

We will continue to focus on eliminating the unfunded liability by 2016 with an average assessment rate held at $2.65/$100 of payroll. Each year the Board of Directors will evaluate how we are progressing and if financial gains are greater than anticipated in our funding strategy and results reflect long term trends, we will consult with stakeholders about whether these financial gains should be used to enhance benefits, reduce assessment rates or both. Financial gains occur when either revenue is greater than expected or costs are lower than expected.

In years when financial results are worse than anticipated, the Board of Directors would consider the severity relative to the funding strategy and determine whether or not these results reflect a longer term trend. In consultation with stakeholders, the Board would assess whether premiums would need to increase or the period to eliminate the unfunded liability should be extended.

The funding strategy reflects assumptions regarding estimated costs and revenues (see Appendix C). These assumptions were based on twenty-two years of historical data indicating that the compound rate of increase in claims costs incurred and administration costs had outpaced the rate of increase in assessable payroll by more than 2% from 1971 to 1992. In addition, assessable payroll had actually declined slightly and was stagnant in the three years ending in 1992.

Positive economic conditions, combined with operational improvements, have improved the Workers' Compensation Board's actual financial position. However, positive variances from the funding plan are subject to reversal as was the case in 2003 with the inclusion of the estimated costs of chronic pain related benefits.

Recent Financial Results

The operating results for 2006 and 2005 are attributed to the following factors:

	2006 (000's)	2005 (000's)
Assessment revenue in excess of current year costs	\$29,637	\$44,157
Investment income above (below) liability requirements*	(47,393)	2,179
Actuarial liabilities (greater) less greater than previously anticipated	7,586	(20,695)
Excess (Deficiency) of revenue over expenses applied to reduce the unfunded liability	(10,170)	25,641
Change in other comprehensive income	85,731	(3,343)
Total comprehensive income	\$75,561	\$22,298

*Shortfall of investment income relative to growth in present value of the benefits liabilities.

In workers' compensation, assessment revenue should roughly equal current year costs. Otherwise transfers to or from future or past employers are occurring. Transfers from current and future employers to past employers will be the case in Nova Scotia until the unfunded liability is eliminated. The elimination of the unfunded liability will discontinue the intergenerational transfers of wealth. Currently, approximately 1/6 of the assessment rate is being used to absorb the shortfall between investment income and the growth in the benefits liability and to eliminate the unfunded liability.

Over the long term, investment income should be expected to equal liability requirements. That is, the invested funds should increase at a rate equal to the increase in the liability. Actuarial adjustments and changes in assumptions, in a stable system, should be held to marginal levels, reflecting minor differences between actual experience and estimates.

Future Claims Costs and Potential Savings

Real changes in claims costs incurred, excluding inflation, may result from three factors:

1. The benefit structure is contained in the *Workers' Compensation Act*, which is the governing legislation. Bill 90 mandated a review of the legislation, which was completed in March 2002 (Dorsey Report). Court decisions and resulting legislation periodically expand coverage. In 2003, a court decision relating to chronic pain benefits had a significant impact on the unfunded liability and on the estimated claims costs incurred for current and future years.

2. The number and severity of injuries, which occur in work places across the province. This is normally correlated with the real growth in the economy but also reflects to some degree the shift between different sectors of the economy. This is important, as certain sectors are more subject to workplace injuries than other sectors.

3. Administrative processes can have a significant impact on claims costs incurred, primarily due to changes in the way that claims are administered. For example, the WCB's early intervention philosophy is anticipated to reduce claims costs incurred over time by shortening durations for the average claim and reducing the number of claims going on to long term disability. However this philosophy of increased early support has increased some costs as we look more broadly to determine how we might assist injured workers to return to work. These expenses are intended to reduce overall costs by helping injured workers return to work.

   It is important to recognize that the *Workers' Compensation Act* of Nova Scotia has legislative language on the process of estimating potential earnings ability (EPEA) requiring that alternative work be both suitable and available. Relative to other jurisdictions, this limits the impact of the EPEA process on claims costs.

Experience with the earnings loss system indicates a lower volume of new PIB/EERB benefits than those originally anticipated. Based on actual experience, our actuary has developed new run-off tables used to estimate the future number and cost of long term disability awards. This change, combined with some smaller offsetting changes, resulted in a downward actuarial adjustment to the benefits liability of $86.1 million recognized in 2003.

Other areas of potential savings include improvements in duration with potential saving growing to $11 million annually by 2016, and aggressive prevention programs yielding targeted annual savings growing to $25 million by 2016.

The method of determining claims costs for any given year involves weighting the payments of the current year plus the prior two years. The timing of the savings (in

terms of dollars) will therefore lag the achievement of the duration goal (in terms of days) until the improvement is sustained for a 3 year period.

In order to achieve the $11 million annual savings on durations, the 84 day composite duration target will need to be achieved by 2013 with the balance of savings continuing to materialize to the end of 2016. Similarly, the 2.26 injury frequency target will have to be achieved by 2014 with cost savings continuing into 2016.

Administration Costs and Legislated Obligations

The proposed 2008 Administrative and Legislated Obligations budget request of $58.24 reflects the operational, capital and project investments needed to deliver results in the various areas noted above while maintaining the current average actual assessment rate, unfunded liability retirement date, and a continued focus on the reduction of claim costs. Details are available in the 2008 Administrative and Legislated Obligations Projected Budget paper.

Factors Considered

Funding of the workers' compensation system reflects the balance struck between the level of benefits, rates charged to employers and the WCB's funding position. When financial results are different from the target, whether better or worse, the choice becomes to adjust benefits, rates, or the WCB's funding position by lengthening or shortening the elimination period for the unfunded liability. As the level of benefits is set by the legislature, and is subject to interpretation by the courts, the funding equation is not entirely within the control of the WCB as the neutral administrator.

A variance from the plan may arise in any given year. Any variance from the plan is subject to reversal in subsequent years. Investment returns and inflation are, of course, subject to significant volatility.

Factors to consider when constructing a strategy to eliminate the unfunded liability include:

1. Stability - regardless of the rate strategy selected, employers would likely prefer to have some certainty and a long-term outlook with respect to the direction rates are heading as opposed to a significant amount of volatility.

2. Competitiveness - at more than 2 1/2% of payroll, Nova Scotia rates are currently the second highest rates in the country while providing among the lowest benefits to individuals. Certainly any additional increases will diminish Nova Scotia's competitiveness relative to our neighbouring provinces. The Workers' Compensation Board is eager to work with stakeholders to develop strategies to avoid further rate increases.

3. Public policy in the context of an unfunded liability - the on-going existence of a large unfunded liability tends to have a dramatic impact on any significant policy or financial initiative considered by the WCB or the Legislative Assembly when considering new legislation.

4. Intergenerational transfers - the sooner the unfunded liability is eliminated, the sooner intergenerational transfers between employers are avoided in terms of payments for past years being absorbed by current and future employers. This is particularly important to the extent that the mix of the economy amongst industrial sectors is changing over time. Even if the actual employers remained relatively consistent over time, their appropriate share of the risk and costs based on their industry sector might change over time.

5. Security - the continued existence of an unfunded liability calls into question the sustainability of the fund and the security of future benefits.

Rationale for Key Assumptions

A key point to emphasize throughout the discussion of the estimates used in establishing the funding strategy is the interdependence of various assumptions.

In some cases, the relationship between two or more assumptions plays a more significant role in the projections than the choice of individual assumptions. For example, when determining the assessment rate required to fund the cost of future injuries, it is the relationship between the rate of claims cost increase and assessable payroll growth rate that is more important than either of the individual rates. Therefore, it is important to take care in setting both individual assumptions and the relationships among the various assumptions.

The rationale for the various assumptions proposed is as follows:

1. Consumer Price Index Assumption

   Based on an analysis of CPI using a running 5-year, 30-year and 50-year average, a long-term assumption of 4% is considered reasonable for 2013 forward.

   For medium-term planning, the Conference Board of Canada's forecast at November, 2006 indicated the following inflation rates:

2007	1.3%
2008	2.0%
2009	2.0%
2010	2.0%
2011	2.0%
2012	2.0%

The Bank of Canada has stated as part of its monetary policy that it intends to keep CPI between 1% and 3%. The Bank's resolve at the upper end of this limit has not been tested. It remains to be seen if the Bank will indeed ratchet interest rates up substantially to control inflation if simultaneously the economy is in recession.

The long-term assumption noted above is considered the most relevant for the Workers' Compensation Board's long-term financial planning, as we are primarily concerned with specific components of inflation, wages and health care costs, rather than the general inflation rate. We have however, adjusted the CPI assumption used in the funding strategy to 2.0% for the years 2008 to 2012, in keeping with the above-noted forecasts, for medium-term planning and projections.

2. Claims Costs Incurred

The original funding strategy assumed claims costs incurred would grow at the rate of inflation (CPI) except for health care costs which would grow at CPI plus 0.5%. The inflation assumption for health care costs was increased to CPI plus 1% in 2002, CPI plus 1.5% in 2003, CPI plus 1.75% in 2004 and CPI plus 3.5% in 2005. For 2007 through 2012, we assume health care costs will grow at a rate of CPI plus 3.75% as the projected rate of CPI was revised to 2% (from 4%) with no similar reduction expected in health care costs for the year.

The WCB is subject to risk of future retroactive changes to benefits as a result of an appeal or legislative change. In an attempt to mitigate the impact of such a change we have increased the expected rate of growth in short term and long term benefits to CPI +1% for 2013 and subsequent years.

3. Assessable Payroll

The original funding strategy assumed that the rate of growth in claims costs incurred would exceed the rate of growth in assessable payroll by approximately 1% a year. This was reasonable based on the figures from 1971 to 1992, which indicated the compound rate of growth in assessable payroll was almost 10% versus claims costs incurred and administration, which had grown at almost 12.5%.

This trend has changed has continued in the most recent ten years where claims costs incurred and administration have grown at 6.3%; and payroll has grown 4.3%. This trend appears to be inconsistent with other jurisdictions; the data indicates that the Canadian average experience is benefit costs growing slightly less rapidly than payroll. In Nova Scotia over the 36-year period of 1971 to 2006, claims costs incurred and administration costs have grown at a compound rate of almost 9% while assessable payroll has grown at almost 7.4%.

The question is whether the funding strategy should use the long term 1971 to 2006 or the more recent 1993 to 2006 history to forecast the rate of growth relative to claims costs incurred and administration. The average assessment rate table in Appendix A indicates the importance of the relationship between the rate of growth of claims costs incurred and assessable payroll. All other things being equal, if payroll grows 1% slower than claims costs, and prevention and duration initiatives are successful, the average rate for current year costs will actually decrease from $2.28 in 2007 to $2.03 in 2016.

The funding strategy assumes that the rate of growth in claims costs incurred exceeds the rate of growth in assessable payroll by 1% per year. However, anticipated claims costs incurred is then reduced for targeted prevention and duration savings.

4. Real Rate of Return

The funding strategy has a real rate of return assumption of 3.5%. Analysis indicates that 3.5% is a realistic real rate of return based on 5 year running averages, 30 year running averages and 75 year running averages. The real rate of return coupled with our long term CPI assumption of 4%, yields a nominal rate of 7.5%.

Declines in market values in the last quarter of 2000 through the last quarter of 2002 indicate how quickly gains may be erased. During this period the market value of the WCB's portfolio only increased $51 million despite cash contributions of $123 million indicating the securities held declined in value by $72 million.

Effective January 1, 2004, the WCB changed its accounting policy for investments, based on the new CICA Handbook Section 3855 "Financial Instruments - Recognition and Measurement". The adoption of Section 3855 necessitates the adoption of Sections 1530 – "Comprehensive Income". Section 1530 represents a new requirement to present certain gains and losses outside of the statement of operations in a separate statement of comprehensive income. Under the new policy, all investments are designated as available-for-sale, and are carried at fair value. Realized gains and losses are recognized as investment income in the year in which they occur. Unrealized gains and losses are recognized in other comprehensive income until the investment is sold.

In determining income from operations, only the recognized investment income is reflected, however all of the investment income is included in determining total comprehensive income. The difference between the returns achieved and the returns included in the financial statements as investment income are adjusted to accumulated other comprehensive income.

Smoothing of investment returns is no longer permitted for annual financial statement reporting. However, the WCB believes smoothing of investment returns in the funding plan continues to be appropriate.

Estimated investment income for 2007 through 2016 reflects the new accounting policy as described in note 2 of the 2006 Financial Statements. Our approach is to estimate investment income based on a pattern that will yield a real rate of return that falls between 7.25% and 7.75% over the life of the funding period. We recently contracted Eckler Partners to determine the expected return of our benchmark portfolio over the next ten years in order to assess the reasonableness of our assumption with respect to long term investment returns. The analysis suggested a 74% probability that long term returns will fall within plus or minus 2% of the range assumed over the estimated funding period. Based on this analysis, we are comfortable that our assumption in this area is reasonable.

Variations between the anticipated investment revenue and the actual investment revenue are expected. To remain in line with the long-term real rate of return assumption in the funding strategy, an adjustment may be required to balance the actual short-term returns to the expected long-term returns. The appreciation in market value in 2006, along with normal annual activity generated recognized investment returns of approximately 5%. Adding the change in total comprehensive income increases the returns achieved in 2006 to 14.5%. This along with investment income of other years results in an overall return of 8.3% to 2006, with $110 million smoothed out from 2011 to 2014 to arrive at a return within the range of 7.25% to 7.75%.

5. Mortality

The mortality assumption that underlies the calculation of liabilities and claims costs incurred for long-term disability and survivors' pensions will also influence the projections. The 2003 benefits liability valuation moved to the 1983 group annuitant mortality table as the basis underlying liabilities under those categories for which a mortality assumption has been made. There are newer versions of the group annuitant mortality table and it is prudent to review the reasonableness of the mortality assumption from time to time. Given the general trend over recent years to increased life expectancies, it is quite possible that future valuations will feature actuarial adjustments in respect of mortality. Such adjustments, in the absence of other offsetting adjustments, would lead to increases in both liabilities and claims costs incurred projections.

Key Areas of Uncertainty

There are key areas of uncertainty that the WCB considers when it deliberates with respect to the funding strategy. Some of these areas of uncertainty include:

1. The WCB has limited experience to date with long term disability costs in an earnings loss environment. The funding strategy has not considered any significant variance from CPI. The funding strategy has not made any provision for further reductions, beyond those discussed in the 2003 annual report, in claims costs incurred or reductions in the unfunded liability that may result from actual experience in earnings loss.

2. The claims costs incurred side of the funding equation is driven primarily by legislative decisions with respect to benefit levels. The March 2002 report titled "The Nova Scotia Workers' Compensation Program, A Focused Review" (The Dorsey Report) contained recommendations for program enhancements. Short-term changes, such as increases in indexing, increases in maximum assessable earnings, and elimination of the three-worker rule are now considered longer-term objectives and have therefore been eliminated from the base case.

3. Due to the partial indexation formula that applies to clinical rating system (CRS) pensions, permanent impairment benefits (PIB), and extended earnings replacement benefits (EERB), CPI increases below those assumed represent a risk from the fund's perspective. Pensions are increased each year beginning January 1, 2000 by a portion of the increase in CPI for the preceding year. This means that the other portion of the CPI increase effectively reduces the benefits liabilities. If CPI increases fall below those assumed in the funding strategy, on average the increases in the benefits liabilities will be higher than expected.

4. The cost estimates assume that there will be no change in the WCB's policy, practice, or experience and that there will be no coverage for new conditions. Any provision for new benefit costs flowing from judicial decisions, legislative amendments, and/or changes in WCB policy except as expressly noted in this document will require revisions to the funding strategy.

5. The Canadian Institute of Chartered Accountants is currently considering the adoption of the International Financial Reporting Standards. Three of the more significant proposed standards that could have an impact for the WCB include:

    - Investments recorded at market value
    - Capital Assets reported at market value
    - Liabilities reported at market value

In 2004, the WCB changed its method of recording investments as per CICA Handbook Sections 3855 and 1530. As per these sections, investments are recorded at market value. The recommendation on capital assets will not have a material impact on the financial position of the WCB.

However, the recommendation affecting liabilities could impact the funded position significantly. We currently use our long term expectation of returns as the discount rate, a nominal 7.5%. If we could use the long bonds rate with a duration similar to our benefits liabilities, the discount rate would likely be closer to 6%. If the WCB is required to change our discount rate, the liability could increase by an estimated 15-25%. It is anticipated that the CICA will adopt this method for recording liabilities at market value beginning in or around the year 2011. Such an increase could impact both the funding period and the average rates and could lead to a funding date beyond 2016.

6. **The attached projections are estimates based on the assumptions noted. Actual results will vary from the information presented and the variation may be material.**

References to an anticipated full funding date should be read as the mid point of a range of plus or minus 3 years.

Although the Funding Strategy clearly labels assumptions as such, many users may credit the strategy with more certainty and precision than warranted given the number and nature of assumptions it contains. Users should remember that the Funding Strategy is our best estimate of what will happen given the assumptions. As noted in previous Annual Reports and the Funding Strategy, actual results will differ from the projections and these differences may be material.

Appendix A

2008 - 2012 Financial Projections

For the purposes of the Financial Projections contained in Appendix A, the base case funding strategy contained in Appendix B was used. The funding strategy figures include insured firms only. Moving from the funding strategy figures in Appendix B to the Projected Statement of Operations (2008) in Appendix A requires an addition of $33.9 million to claims costs incurred, $5.5 million to administration costs, and $39.3 million to assessment premium revenue in respect of self-insured firms.

WORKERS' COMPENSATION BOARD OF N.S.
PROJECTED STATEMENT OF OPERATIONS

	2006 Actual	2007 Budget	2007 Projection	2008 Projection	2009 Projection	2010 Projection	2011 Projection	2012 Projection
REVENUE:								
Assessments - Regular Classified	205,127,000	211,367,000	213,740,000	217,985,000	222,315,000	226,731,000	231,234,000	235,830,000
Assessments - Self Insured	37,606,000	40,368,000	38,282,000	39,323,000	40,400,000	41,513,000	42,663,000	43,852,000
Net Investment Income	49,571,000	50,000,000	44,456,000	49,138,000	54,368,000	60,098,000	66,363,000	72,428,000
	$292,304,000	$301,735,000	$296,478,000	$306,446,000	$317,083,000	$328,342,000	$340,260,000	$352,110,000
CLAIM COSTS	162,942,000	155,334,000	166,022,000	166,417,000	165,475,000	165,681,000	166,606,000	167,882,000
GROWTH PV OF BENEFITS LIABILITY	89,378,000	106,284,000	101,762,000	109,394,000	117,598,000	126,418,000	135,899,000	146,092,000
ADMINISTRATION COSTS *	42,991,000	44,785,000	44,607,000	42,996,000	43,877,000	45,422,000	47,160,000	48,998,000
LIABILITY FOR FUTURE ADMINISTRATION COSTS	(2,876,000)	(2,000,000)	(2,000,000)	(1,500,000)	(1,000,000)	(500,000)	(500,000)	(500,000)
LEGISLATED OBLIGATIONS	8,801,000	11,757,000	11,757,000	12,421,000	12,824,000	13,265,000	13,795,000	14,347,000
SYSTEM SUPPORT	0	532,000	532,000					
ADJUSTMENT	1,238,000	0	0	616,000	616,000	636,000	657,000	679,000
	$302,474,000	$316,692,000	$322,680,000	$330,344,000	$339,390,000	$350,922,000	$363,617,000	$377,498,000
EXCESS OF OPERATING EXPENSES OVER REVENUES	(10,170,000)	(14,957,000)	(26,203,000)	(23,898,000)	(22,307,000)	(22,580,000)	(23,357,000)	(25,388,000)
CHANGE IN OTHER COMPREHENSIVE INCOME	85,731,000	-	38,890,000	42,985,000	47,560,000	52,574,000	38,054,000	33,360,000
TOTAL COMPREHENSIVE INCOME	$ 75,561,000	$ (14,957,000)	$ 12,687,000	$ 19,087,000	$ 25,253,000	$ 29,994,000	$ 14,697,000	$ 7,972,000

*** Excludes Total Capital**

Notes:

1) The average assessment rate used to calculate revenue is $2.65 through 2016.

2) It is important to note that these cost estimates assume that there will be no change in the WCB's policy, practice, or experience and that there will be no coverage for new conditions. Any provision for new benefit costs flowing from judicial decisions, legislative amendments, and/or changes in WCB policy except as expressly noted in this document will require revisions to the funding strategy.

3) The Statement of Operations reflects the administrative expenses net of an adjustment for the liability for future administrative expenses. This adjustment is approximately 6% of the difference between claims costs incurred (CCI) and claims payments made(CPM). In theory, CCI and CPM would be relatively close in dollar amounts with a minimal adjustment. In recent years adjustments have been made to the benefits liability to reflect the inclusion of chronic pain benefits, resulting in CPM exceeding CCI by a significant margin. This margin is factored into the funding strategy with a decreasing trend as the adjudication of chronic pain claims are processed through the system and the margin between CPM and CCI is less.

4) Based on administrative budget assumptions and funding strategy projections. (Funding Strategy - Current June 2007)

UNFUNDED LIABILITY

	2006 Actual	2007 Budget	2007 Forecast	2008 Projection	2009 Projection	2010 Projection	2011 Projection	2012 Projection
GROSS UNFUNDED LIABILITY, BEG. OF YEAR	($379,860,000)	($390,030,000)	($390,030,000)	($416,233,000)	($440,131,000)	($462,438,000)	($485,018,000)	($508,375,000)
SURPLUS (DEFICIT) APPLIED	($10,170,000)	($14,957,000)	($26,203,000)	($23,898,000)	($22,307,000)	($22,580,000)	($23,357,000)	($25,388,000)
GROSS UNFUNDED LIABILITY, END OF YEAR	($390,030,000)	($404,987,000)	($416,233,000)	($440,131,000)	($462,438,000)	($485,018,000)	($508,375,000)	($533,763,000)
ACCUMULATED OTHER COMPREHENSIVE INCOME	$129,963,000	$44,232,000	$168,853,000	$211,839,000	$259,400,000	$312,011,000	$350,140,000	$383,583,000
NET UNFUNDED LIABILITY, END OF YEAR	($260,067,000)	($360,755,000)	($247,380,000)	($228,292,000)	($203,038,000)	($173,007,000)	($158,235,000)	($150,180,000)
FUNDED RATIO	**81.2%**	**83.0%**	**83.0%**	**85.4%**	**88.0%**	**90.3%**	**91.8%**	**92.7%**
UNFUNDED LIABILITY (ORIGINAL FUNDING STRATEGY JUNE 1, 1995)	($446,054,000)	($454,633,000)	($463,049,000)	($471,261,000)	($479,222,000)	($486,881,000)	($486,881,000)	($494,183,000)
	46.4%	**46.4%**	**47.5%**	**48.7%**	**49.9%**	**51.1%**	**51.1%**	**52.3%**

	Claims Cost Incurred and Admin	Shortfall* and Unfunded Liability	Total
2007	$2.28	$0.37	$2.65
2008	$2.22	$0.43	$2.65
2009	$2.18	$0.47	$2.65
2010	$2.18	$0.47	$2.65
2011	$2.13	$0.52	$2.65
2012	$2.12	$0.53	$2.65
2016	$2.03	$0.62	$2.65
2017	$2.05	$0.00	$2.05

Appendix B

Current Funding Strategy
& Assumptions

Funding Strategy - (Base Case - June 2007)
Rate of $2.65 through 2016.
Administration and Legislated Obligations Budget 2008-2012:Duration Targets; Prevention Targets
Payroll - 2% from 2007 through 2012 (CPI); 4% 2013 forward (CPI)
2007 Assessment Revenue and Claims Cost Incurred = Forecast.
Duration offsets 2006 to 2016($11.4 M); Prevention offsets in 20+B2106 through 2016 ($25.2 M)
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Income Statement
Workers' Compensation Board of Nova Scotia

Admin. Costs:	CPI
Health Care, Rehab Non-Income:	CPI + 3.5% for 2007 to 2012; CPI + 1.75% for 2013 Forward
Other Claims Costs Incurred:	CPI for 2006 to 2012; CPI +1% for 2013 Forward
Payroll:	CPI
Rate Required:	$ 2.65

Calendar Year	Total Assessme Rate	Govt Contrib. plus UL Surcharge	Avg A/R used for admin. and new claims incurred	Assessable Payroll ($millions)	Total Revenue ($millions)	Assessment Revenue ($millions)	Assessment Penalties ($millions)	Investment Revenue ($millions)	Recognized Inv Revenue ($millions)	Change In OCI	Admin & Leg. Obl. ($millions)	Total Incurred Claims ($millions)	Total Incurred Claims plus Admin. ($millions)	Growth in PV of Liab ($millions)	Adj. To Ben. Liab. ($millions)
2001	2.54	0.70	1.84	6,447	205.431	155.340	2.173	47.918	47.918	-	27.059	91.313	118.372	69.306	0.00
2002	2.54	0.68	1.86	6,774	198.493	169.659	1.540	27.294	27.294	-	29.594	96.092	125.686	49.897	21.540
2003	2.54	0.70	1.84	7,081	222.884	182.795	1.726	38.363	38.363	-	30.357	99.635	129.992	-13.784	168.328
2004	2.59	0.65	1.94	7,396	216.346	189.444	1.703	25.199	25.199	-	34.775	108.837	143.612	70.287	0.000
2005	2.65	0.58	2.07	7,612	296.800	199.967	1.501	95.332	95.332	-	38.260	119.051	157.311	113.847	0.000
2006	2.65	0.42	2.23	7,852	254.698	203.795	1.332	135.302	49.571	85.731	44.676	130.814	175.49	96.964	(7.586)
2007	2.65	0.37	2.28	8,009	258.196	212.240	1.500	83.346	44.456	38.890	49.596	133.042	182.64	101.762	0.000
2008	2.65	0.43	2.22	8,169	267.123	216.484	1.500	92.124	49.138	42.985	49.074	132.554	181.63	109.394	0.000
2009	2.65	0.47	2.18	8,333	276.682	220.814	1.500	101.928	54.368	47.560	50.694	130.697	181.39	117.598	0.000
2010	2.65	0.47	2.18	8,499	286.829	225.230	1.500	112.672	60.098	52.573	55.031	129.959	184.99	126.418	0.000
2011	2.65	0.52	2.13	8,669	297.598	229.735	1.500	104.416	66.363	38.053	55.146	129.909	185.05	135.899	0.00
2012	2.65	0.53	2.12	8,843	308.258	234.330	1.500	105.788	72.428	33.360	57.379	130.175	187.55	146.092	0.00
2013	2.65	0.57	2.08	9,196	323.899	243.703	1.500	117.540	78.697	38.843	58.527	133.039	191.57	157.049	0.00
2014	2.65	0.59	2.06	9,564	340.578	253.451	1.500	130.633	85.627	45.006	60.868	136.251	197.12	168.827	0.00
2015	2.65	0.61	2.04	9,947	358.333	263.589	1.500	174.814	93.244	81.570	63.302	139.979	203.28	181.489	0.00
2016	2.65	0.62	2.03	10,345	378.423	274.13	1.500	192.713	102.791	89.922	65.83	143.85	209.69	195.10	0.00
2017	2.05	0.00	2.05	10,758	333.908	220.55	1.500	209.739	111.861	97.878	68.47	151.55	220.02	209.73	0.00

Funding Strategy - (Base Case - June 2007)
Rate of $2.65 through 2016.
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Workers' Compensation Board of Nova Scotia

Calendar Year	BOY Estimated Liabilities ($000s)	BOY Estimated OCI ($000s)	BOY Estimated Assets ($000s)	BOY Gross UL ($000's)	BOY Net UL ($000's)	BOY Estimated Funded Percentage	Surplus (Deficit) From Op's ($000's)	Total Comp Income ($000's)
2001	955,004	0	647,214	308,348	308,348	67.77%	17,753	17,753
2002	1,064,227	0	712,383	351,669	351,669	66.94%	1,370	1,370
2003	1,114,446	0	764,147	350,299	350,299	68.57%	(61,652)	(61,652)
2004	1,241,072	0	829,121	411,951	411,951	66.81%	2,447	2,447
2005	1,279,639	47,575	921,713	405,501	405,501	72.03%	25,642	25,642
2006	1,318,255	44,232	982,627	379,860	335,628	74.54%	(10,170)	75,561
2007	1,356,820	129,963	1,096,753	390,030	260,067	80.83%	(26,203)	12,687
2008	1,458,582	168,853	1,211,201	416,233	247,380	83.04%	(23,898)	19,087
2009	1,567,975	211,838	1,339,682	440,132	228,294	85.44%	(22,307)	25,253
2010	1,685,573	259,398	1,482,532	462,439	203,041	87.95%	(24,580)	27,994
2011	1,811,991	311,972	1,636,944	487,018	175,047	90.34%	(23,357)	14,697
2012	1,947,891	350,025	1,787,540	510,375	160,350	91.77%	(25,388)	7,972
2013	2,093,982	383,385	1,941,604	535,763	152,378	92.72%	(24,715)	14,128
2014	2,251,031	422,228	2,112,781	560,479	138,250	93.86%	(25,369)	19,637
2015	2,419,858	467,234	2,301,246	585,847	118,613	95.10%	(26,438)	55,132
2016	2,601,348	548,804	2,537,867	612,285	63,481	97.56%	(26,365)	63,557
2017	2,796,449	638,726	2,796,525	638,650	(76)	100.00%	(95,845)	2,034

Appendix C

Assumptions - Wage Loss Costing Model –Historical Basis for Funding Strategy

Note: The attached letter refers to a blind sample of Revenue Canada Taxation income tax information concerning 1,371 pensions which was the best empirical evidence available at the time to predict the cost of the new system. The blind sample was of all 1991 pensions awarded (1371 claims) and compared pre-accident earnings (1985) to post-accident earnings (1989 –1991). The data was provided to the WCB by Revenue Canada by group only, so individuals were not identified.

March 12, 1997
Direct line: (902) 490-3303

Mr. Leo McKenna, C.F.O.
Workers' Compensation Board
5668 South Street
P.O. Box 1150
Halifax, Nova Scotia
B3J 2Y2

Dear Leo:

Re: "Laundry List" of Key Wage Loss Costing Assumptions

Please find enclosed the "Laundry List" which was requested by you and Jim Houston at a meeting on February 25, 1996.

The current format covers all of the key assumptions and also goes into background details regarding earnings information and assumed LTD awards patterns. However, the high level information remains on one page - the first page of the attachment - which is basically a slightly modified version of one of the overheads I used in my recent presentations to Management. The remaining pages of the attachment provide further details. Still further details would be available at the Board and are perhaps in the Wage Loss Costing "Brick", which was compiled by Marlene Morrison. These further details would pertain to the nuts and bolts calculations regarding Unemployment Insurance and CPP offsets as well as the treatment of seasonal workers.

Please call me if you have any questions.

Yours truly,

Douglas W. Taylor

DWT/cln

enclosure

Wage Loss
Costing Model

Major Assumptions

Old System:

Average Age:	47
Average PMI:	10.6%
Average Pre-Accident Earnings:	$25,000
Gives Average Monthly Benefit of:	$165.63

	Assumed	Actual
Average Annual LTD Volume assumed unchanged except through service improvements	1045*	Too soon

New System (see attached for further details):

EERB:

	Assumed	Actual
Average Age (Benefit Weighted):	50	**
Average Monthly Benefit:	$592.43	$852
% of LTD Cases with Earnings Loss:	56%	Too soon

PIB:

	Assumed	Actual
Average Age:	44	**
Average PMI:	10.6%	
Average Monthly Benefit:	$39.74	$21
% of All Cases with PIB:	100%	

* See attached run-off assumptions

** Assumed that 3% of these are over 65 and ineligible for EERB.

Data

The data used in the Wage Loss Model were derived from a blind sample of Revenue Canada Taxation income tax information concerning pensions in 1988. The following is a summary of the data.

Group	Description	Average Age	% of all new LTD cases	Pre-accident earnings	Post-accident earnings	Assumed deeming
1	No employment earnings in the 3-year period following the award	55	18	$22,874	$0	$0
2	Employment earnings in only one or two of the 3-years following the award	45	20	$21,321	$7,406	$4,400
3	Employment earnings all three years following the award but at a reduced level	43	18	$29,675	$19,886	$0
4	Employment earnings at an equal or greater level in all three years following the award	44	44	$23,524	n/a	n/a

It was assumed, based on a review of new awards in 1991, that 3% of all new cases would be in respect of individuals already over age 65.

Other Assumptions

(1) The relative effect on the current and future costs of accidents, occurring in any given calendar year, will be the same as the effect on the awards in the sample which the model utilizes.

(2) Percentage of seasonal workers is assumed to be 20%.

(3) Pre-accident earnings are assumed to decrease by 25% for all cases which are on UIC. This is based on an assumed policy which:

(i) includes UIC as earnings in any given year;
(ii) UIC at level provided under old Act; and
(iii) number of weeks worked, approximately 22.

(4) The average number of weeks worked by seasonal employees or employees on UIC is assumed to be 22 weeks.

(5) The average disability percentage for CRS awards is assumed to be 10.6%, as derived from the sample.

(6) Assumed that 26% of all wage loss cases will be receiving CPP after the accident and that the Board will only recognize 50% of the CPP as a post-accident earnings reduction since employee paid ½ CPP premium.

Wage Loss Costing Model

Assumed Run-off of LTD Awards

Duration at which First LTD Payment Made	Number of Expected Awards		
	PIB Only	PIB/EERB	Total
0	19	3	22
1	238	86	324
2	97	139	236
3	38	123	161
4	18	70	88
5	12	45	57
6	9	24	33
7	3	10	13
8	2	7	9
9	4	5	9
10	2	5	7
11	1	2	3
12	2	2	4
13	3	6	9
14	0	7	7
15	3	1	4
16	0	2	2
17	1	2	3
18	1	0	1
19	1	2	3
20+	10	24	34
Total	464	565	1,029

Notes:

1. Duration = Calendar year of payment minus calendar year of accident.

2. PIB Only Awards based on 85% of number of Lump Sum Awards based on 1992 Experience; 85% = 44%/52% where 44% is expected proportion of new LTD awards receiving PIB Only awards and 52% is the historical proportion of new LTD awards receiving lump sums (based on 1992 data).

3. PIB/EERB Awards based on 113% of number of new pension awards based on 1992 Experience; 113% = $\frac{97\% \times 56\%}{48\%}$

where: 97% reflects that 3% of new awards are for individuals already over 65 (and hence ineligible for EERB)

56% reflects the expected portion of new LTD claims suffering an earnings loss

48% reflects the historical proportion of new LTD awards receiving periodic pensions (based on 1992 data).

4. The total is less than 1,045, the historical volume based on 1992 data, because of the individuals assumed to be already over age 65.